# EMERGENCY SERVICES OF DOOR COUNTY



It is the mission of Emergency Services of Door County to assure readiness and response to everyday emergencies and county crisis situations with an excellence in care that our residents and visitors have come to respect.

# EMERGENCY SERVICES OF DOOR COUNTY



Presented by

Brandon Schopf EMT-P

# EMERGENCY SERVICES OF DOOR COUNTY



## What is Emergency Medical Services?

•Conceptually, it is helpful to think of an EMS system as a practice of medicine, a service provided to the community as an extension of the public safety and health services.

- •Conceptually, it is helpful to think of an EMS system as a practice of medicine, a service provided to the community as an extension of the public safety and health services.
- •EMS is considered a "Critical Workforce", one of the core public services, along with fire-protection and police service, and vital for citizens who reside in, or considering a move to the community.

- •Conceptually, it is helpful to think of an EMS system as a practice of medicine, a service provided to the community as an extension of the public safety and health services.
- •EMS is considered a "Critical Workforce", one of the core public services, along with fire-protection and police service, and vital for citizens who reside in, or considering a move to the community.
- •The delivery of EMS is designed to ensure appropriate and reasonable medical care and transportation for the sick and injured.

- •Conceptually, it is helpful to think of an EMS system as a practice of medicine, a service provided to the community as an extension of the public safety and health services.
- •EMS is considered a "Critical Workforce", one of the core public services, along with fire-protection and police service, and vital for citizens who reside in, or considering a move to the community.
- •The delivery of EMS is designed to ensure appropriate and reasonable medical care and transportation for the sick and injured.
- •EMS systems must be designed to rapidly deploy the right resources when initial information regarding the nature of the illness or injury suggests a reasonable probability that a potentially serious condition exist.

# EMERGENCY SERVICES OF DOOR COUNTY



**History and Overview** 

- •Transport of injured patients was primarily performed by funeral homes.
  - Basic first aid and transport

- Transport of injured patients was primarily performed by funeral homes.
  - Basic first aid and transport
- •1970 The Door County Sherriff Ambulance division forms.
  - Stationed in Sturgeon Bay
  - •EMT Basic level of care
  - Funeral home was primary transport in the northern county

- Transport of injured patients was primarily performed by funeral homes.
  - Basic first aid and transport
- •1970 The Door County Sherriff Ambulance division forms.
  - Stationed in Sturgeon Bay
  - •EMT Basic level of care
  - Funeral home was primary transport in the northern county
- •1975 Emergency Services of Door County becomes its own department
  - North ambulance station opens in Sister Bay

- Transport of injured patients was primarily performed by funeral homes.
  - Basic first aid and transport
- •1970 The Door County Sherriff Ambulance division forms.
  - Stationed in Sturgeon Bay
  - •EMT Basic level of care
  - Funeral home was primary transport in the northern county
- •1975 Emergency Services of Door County becomes its own department
  - North ambulance station opens in Sister Bay
- •1979 Door County completes Paramedic program

- Transport of injured patients was primarily performed by funeral homes.
  - Basic first aid and transport
- •1970 The Door County Sherriff Ambulance division forms.
  - Stationed in Sturgeon Bay
  - •EMT Basic level of care
  - Funeral home was primary transport in the northern county
- •1975 Emergency Services of Door County becomes its own department
  - North ambulance station opens in Sister Bay
- •1979 Door County completes Paramedic program
- •1986 The Sturgeon Bay ambulance station moves "in-house"
  - North station continues to respond from residences

- Transport of injured patients was primarily performed by funeral homes.
  - Basic first aid and transport
- •1970 The Door County Sherriff Ambulance division forms.
  - Stationed in Sturgeon Bay
  - •EMT Basic level of care
  - Funeral home was primary transport in the northern county
- •1975 Emergency Services of Door County becomes its own department
  - North ambulance station opens in Sister Bay
- •1979 Door County completes Paramedic program
- •1986 The Sturgeon Bay ambulance station moves "in-house"
  - •North station continues to respond from residences
- •2004 The Sister Bay ambulance station moves "in-house"

•DCES is a municipal based "third service," governed by the Door County Board. The service is directed by Eric Christensen and overseen by the Emergency Services Committee.

- •DCES is a municipal based "third service," governed by the Door County Board. The service is directed by Eric Christensen and overseen by the Emergency Services Committee.
- •Service Area 483 square land miles as well as parts of Green Bay and Lake Michigan. Door County has a year round population of 28,000, a summer population of over 200,000 and experiences almost 2 million visitors a year.

- •DCES is a municipal based "third service," governed by the Door County Board. The service is directed by Eric Christensen and overseen by the Emergency Services Committee.
- •Service Area 483 square land miles as well as parts of Green Bay and Lake Michigan. Door County has a year round population of 28,000, a summer population of over 200,000 and experiences almost 2 million visitors a year.
- •Responsibilities Response to medical 911 calls, medical support for fire operations, tactical medical support for Door County SWAT and education of the public on matters concerning emergency medical care and transport.

- Call Volume approximately 2100 -2200 calls a years
  Average yearly increase of 3-5%
- •Units 7 ambulances responding out of 4 stations
- Personnel 1 Service Director/EMT Paramedic, 12 full time EMT Paramedics,
   6 casual call Paramedics, 55 part time EMT Basics and over 200 Emergency
   Medical Responders







#### BY THE NUMBERS

- •Cases 2158
- •Contacts 2444
  - •Transports 1538
  - •No Transports (Cancelled, Standby, Treat-Release, etc.) 906
- •Average Patient Age 63
- Dispatch Complaints
  - •Illness (incl. chest pain, stroke, respiratory) 1391
  - •Trauma 480
  - •Traffic accident 171
  - •Fall 146
  - •Unknown Problem/Man Down 48
  - •Standby/cancelled, unknown code 208

670/650

650

650/680

680

City/Township	# of Runs	%	of Runs
Brussels		49	2.00
Brussels (Town of)		53	2.17
Union (Town of)		47	1.92
Gardner		98	4.01
Forestville	- 400	32	1.31
Forestville (Town of)		28	1.15
Maplewood		11	0.45
Total		318	13.01
City/Township	# of Runs	%	of Runs
Clay Banks (Town of)		10	0.41
Nasewaupee	Ostili.	86	3.52
Sturgeon Bay		817	33.43
Sturgeon Bay (Town of)		63	2.58
Sevastopol		138	5.65
Total		1114	45.59
City/Township	# of Runs	%	of Runs
Carlsville		21	0.86
Egg Harbor (Town of)		82	3.36
Egg Harbor		48	1.96
Jacksonport (Town of)		30	1.23
Jacksonport		15	0.61
Total		196	8.02
City/Township	# of Runs	%	of Runs
Fish Creek		60	2.45
Gibraltar (Town of)		125	5.11
Baileys Harbor (Town of)		67	2.74
Baileys Harbor		30	1.23
Ephraim	<u> </u>	33	1.35
Liberty Grove (Town of)	Market Land	216	8.84
Sister Bay		159	6.51
Ellison Bay		6	0.25
Gills Rock		2	0.08
Washington (Town of)		81	3.31
Total		779	31.87

### FUNDING

•Funding for the Ambulance service is a combination of transport fees and tax revenue

#### FUNDING

- •Funding for the Ambulance service is a combination of transport fees and tax revenue
- •EMSDC has it's own billing department that processes and collects payments from Medicare/Medicaid, insurance companies and individuals when there is no payer.

#### COST VERSUS VALUE

- •In 2012 the cost to provide Paramedic level care to the property owner's of Door County was \$0.23 per \$1000 of assessed property value.
  - •Example: A person owning a \$250,000 home pays about \$58 a year for a Paramedic level ambulance service.

#### COST VERSUS VALUE

- •In 2012 the cost to provide Paramedic level care to the property owner's of Door County was \$0.23 per \$1000 of assessed property value.
  - •Example: A person owning a \$250,000 home pays about \$58 a year for a Paramedic level ambulance service.
- •This is less than or comparable to other important services. For example the cost of garbage collection in a Door County municipality is \$0.24 per \$1000 of assessed property value.

#### COST VERSUS VALUE

- •In 2012 the cost to provide Paramedic level care to the property owner's of Door County was \$0.23 per \$1000 of assessed property value.
  - •Example: A person owning a \$250,000 home pays about \$58 a year for a Paramedic level ambulance service.
- •This is less than or comparable to other important services. For example the cost of garbage collection in a Door County municipality is \$0.24 per \$1000 of assessed property value.
- •The Emergency Medical Responders (EMRs) are currently volunteers that in some cases are compensated for time and expense if they choose to respond. A typical compensation is \$20 per call.

# EMERGENCY SERVICES OF DOOR COUNTY



**Levels of Service** 

### TIERED SYSTEM

•Door County is considered a tiered response system.



#### TIERED SYSTEM

- •Door County is considered a tiered response system.
- System consists three levels of caregivers
  - •Emergency Medical Responder
  - •EMT-Basic
  - •EMT-Paramedic



#### TIERED SYSTEM

- •Door County is considered a tiered response system.
- System consists three levels of caregivers
  - •Emergency Medical Responder
  - •EMT-Basic
  - •EMT-Paramedic
- •All responders work under medical protocols approved by the State of Wisconsin and a Medical Director.



## EMERGENCY MEDICAL RESPONDER (EMR)

- Emergency Medical Responder (EMR)
  - Next door neighbor
  - Associated with the local fire department
  - Completed 72 hours of training
  - •Trained in first aid, CPR and Automated External Defibrillation



### EMT - BASIC

- •Used for the transport of "Basic" level patients
- Completed 144 hours of training
- •Trained in Splinting, some medications including the Epi-pen, CPR and Automated External Defibrillator.



#### EMT - PARAMEDIC

- •Paramedics are used for the primary transport of emergent patients.
- •Completed around 1200 hours of training including ACLS, PALS, and other continuing education
- Trained in the use of many medications and procedures including, advanced and surgical airways, manual defibrillation and external cardiac pacing.



# EMERGENCY SERVICES OF DOOR COUNTY



**Stations and Staffing** 

### STATIONS AND STAFFING



#### AVAILABLE STAFFING

- •Brussels (South) − 1 ambulance, 2 on call EMT-B
- •Sturgeon Bay (Central) 1 ambulance, 2 in-house Paramedics
- •Sister Bay (North) 1 ambulance, 2 in-house Paramedics
- •Washington Island 1 ambulance, all call with EMT-B
- Backup Calls Staffed by all call

### SOUTH STATION

- •Call sign 670
- •Stationed at Brussels-Union-Gardner Fire station
- •One BLS level ambulance, staffed 24/7 with paid on call EMT-Basics

# CENTRAL STATION

- •Primary call sign 650 Back up call sign 620
- •Station is located in Sturgeon Bay on 18th Ave., next to the hospital.
- •Two ALS level ambulances
- •One ambulance is staffed 24/7 "in-house" with 2 Paramedics
- •This station also houses management and billing.



# NORTH STATION

- •Primary call sign 680 Back up call sign 640
- •Station is located in Sister Bay on Mill Road, attached to the Sister Bay/Liberty Grove Fire Station.
- •Two ALS level ambulances
- •One ambulance is staffed 24/7 "in-house" with 2 Paramedics.



# WASHINGTON ISLAND STATION

- •Call sign 630
- •Stationed at the Washington Island Fire station on Airport Road.
- •2 BLS level ambulances
- •One BLS level ambulance, staffed 24/7 with paid on call EMT-Basics



# EMERGENCY SERVICES OF DOOR COUNTY



When you call 911

•Call 911



- •Call 911
- Be ready to give the dispatcher proper information
  - Age and gender of the patient
  - Chief Complaint
  - Location



- •Call 911
- •Be ready to give the dispatcher proper information
  - Age and gender of the patient
  - Chief Complaint
  - Location
- Listen to the dispatcher instructions
  - Bystander CPR
  - Heimlich Maneuver
  - •Simple airway opening techniques



- •Call 911
- •Be ready to give the dispatcher proper information
  - •Age and gender of the patient
  - Chief Complaint
  - Location
- •Listen to the dispatcher instructions
  - Bystander CPR
  - Heimlich Maneuver
  - Simple airway opening techniques
- Prepare for EMR and ambulance arrival
  - Control pets
  - Turn lights on the porch
  - Patient's medications or medication list



# EMERGENCY SERVICES OF DOOR COUNTY



Why you call 911

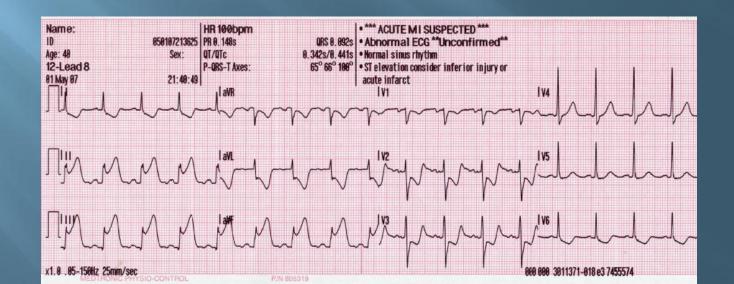
•Can range from a simple sprain of an ankle to a multi system trauma from vehicle accident

- •Can range from a simple sprain of an ankle to a multi system trauma from vehicle accident
- •Leading cause of death ages 1-44

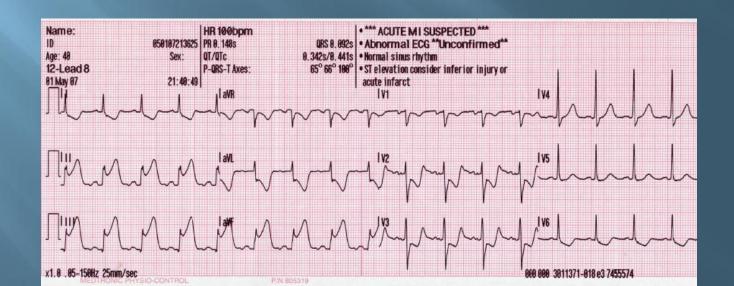
- •Can range from a simple sprain of an ankle to a multi system trauma from vehicle accident
- Leading cause of death ages 1-44
- Treatment is based on the injury type and severity

- •Can range from a simple sprain of an ankle to a multi system trauma from vehicle accident
- Leading cause of death ages 1-44
- Treatment is based on the injury type and severity
- Transport decisions based on:
  - Extent of the injuries
  - Mechanism of injury
  - Distance from appropriate medical destination
  - •In severe trauma mortality is decreased by 25% when at a level 1 Trauma center

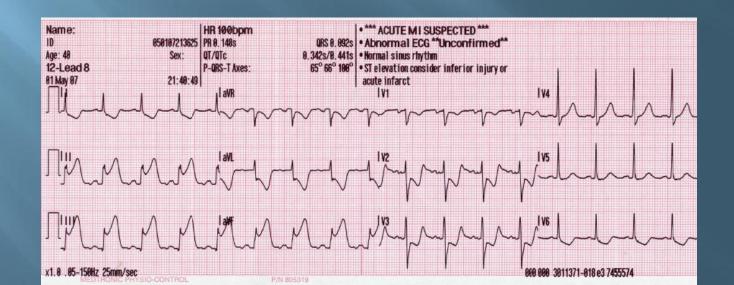
- Myocardial Infarction (Heart Attack)
  - •Chest pain with/without associated radiating pain to the back, neck or arms, shortness of breath, nausea, weakness



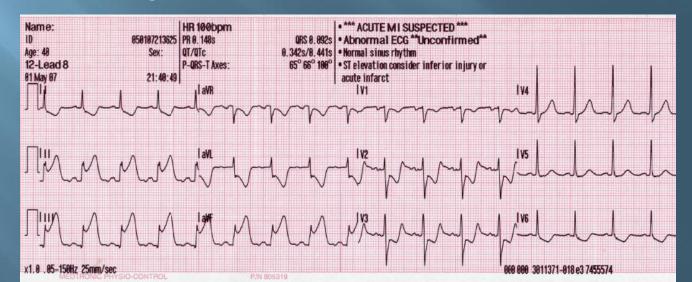
- Myocardial Infarction (Heart Attack)
  - •Chest pain with/without associated radiating pain to the back, neck or arms, shortness of breath, nausea, weakness
  - •Symptoms are often atypical with women and diabetics



- Myocardial Infarction (Heart Attack)
  - •Chest pain with/without associated radiating pain to the back, neck or arms, shortness of breath, nausea, weakness
  - •Symptoms are often atypical with women and diabetics
  - •12 lead EKG can be taken in the field interpreted and sent to the hospital for early recognition and expedited treatments



- Myocardial Infarction (Heart Attack)
  - •Chest pain with/without associated radiating pain to the back, neck or arms, shortness of breath, nausea, weakness
  - •Symptoms are often atypical with women and diabetics
  - •12 lead EKG can be taken in the field interpreted and sent to the hospital for early recognition and expedited treatments
  - Treatment includes oxygen, sublingual nitroglycerine, aspirin, narcotic analgesic



•Congested heart failure (CHF) – The heart is not able to pump properly causing fluid to back up into the lungs or legs.



- •Congested heart failure (CHF) The heart is not able to pump properly causing fluid to back up into the lungs or legs.
  - •Difficulty breathing, crackles, swelling in the legs, weakness and difficulty ambulating



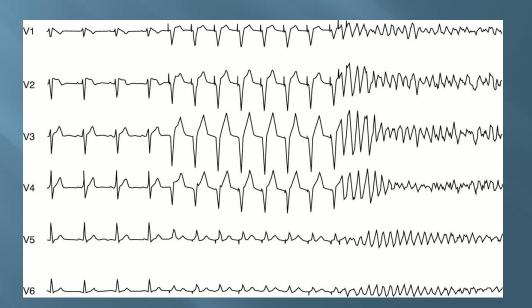
- •Congested heart failure (CHF) The heart is not able to pump properly causing fluid to back up into the lungs or legs.
  - •Difficulty breathing, crackles, swelling in the legs, weakness and difficulty ambulating
  - •This condition is usually known by the patient. When it is acute it is usually secondary to myocardial infarction.



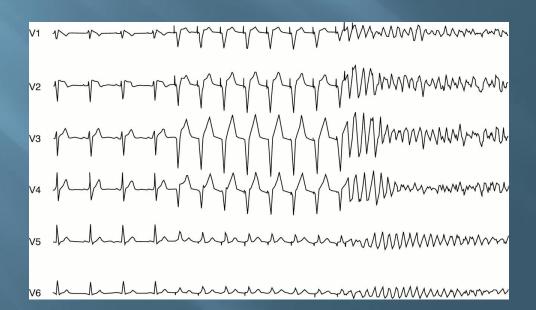
- •Congested heart failure (CHF) The heart is not able to pump properly causing fluid to back up into the lungs or legs.
  - •Difficulty breathing, crackles, swelling in the legs, weakness and difficulty ambulating
  - •This condition is usually known by the patient. When it is acute it is usually secondary to myocardial infarction.
  - Treatment treat the reason if known, oxygen, nitroglycerine, morphine, CPAP, intubation



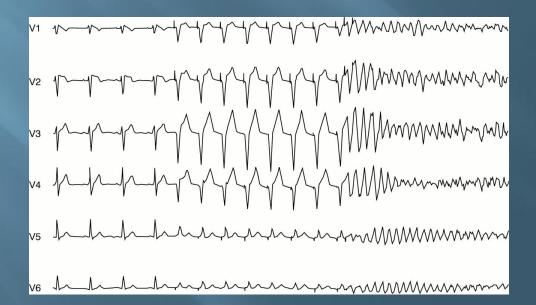
- Symptomatic Arrhythmia
  - •An arrhythmia is an abnormal heart rhythm



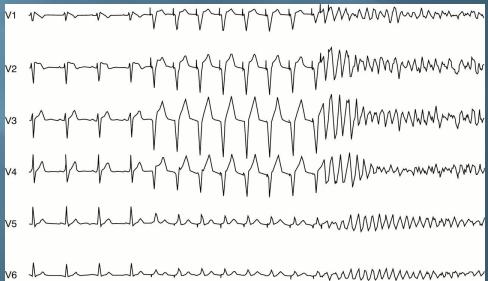
- Symptomatic Arrhythmia
  - •An arrhythmia is an abnormal heart rhythm
  - •Symptoms syncope, low blood pressure, slow or fast heart rate, chest palpitations, chest pain, difficulty breathing, nausea, sudden death (usually associated with myocardial infarction)



- Symptomatic Arrhythmia
  - An arrhythmia is an abnormal heart rhythm
  - •Symptoms syncope, low blood pressure, slow or fast heart rate, chest palpitations, chest pain, difficulty breathing, nausea, sudden death (usually associated with myocardial infarction)
  - Atrial fibrillation can lead to CVA if not treated timely and properly

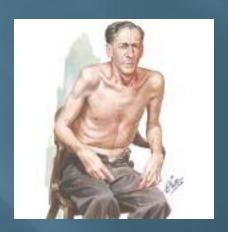


- Symptomatic Arrhythmia
  - •An arrhythmia is an abnormal heart rhythm
  - •Symptoms syncope, low blood pressure, slow or fast heart rate, chest palpitations, chest pain, difficulty breathing, nausea, sudden death (usually associated with myocardial infarction)
  - Atrial fibrillation can lead to CVA if not treated timely and properly
  - •Treatment Identify and fix the arrhythmia. Drugs, pacing, cardioversion, defibrillation, support.



#### PULMONARY CONDITIONS

- •Asthma A reactive airway disease causing the air pathways in the lungs to swell making it difficult for someone to breath.
  - •Symptoms include shortness of breath and wheezing
  - •Treated with steroids and inhaled medications like albuterol and atrovent.



#### PULMONARY CONDITIONS

- •Asthma A reactive airway disease causing the air pathways in the lungs to swell making it difficult for someone to breath.
  - Symptoms include shortness of breath and wheezing
  - •Treated with steroids and inhaled medications like albuterol and atrovent.
- COPD (Chronic Obstructive Pulmonary Disease)
  - Emphysema Lung destruction over time
  - •Chronic Bronchitis Cough with mucus production
  - Usually present in the tri-pod position and using pursed lip breathing.

•Can be either associated with a clot in a brain blood vessel (embolic) or bleeding in the brain (hemorrhagic)



- •Can be either associated with a clot in a brain blood vessel (embolic) or bleeding in the brain (hemorrhagic)
- •Symptoms include: Left or right sided weakness (paresis) numbness (paresthesia) or paralysis, facial droop, difficulty or inability to speak, vision disturbances including dizziness, loss of balance, sudden headache "Worst headache of my life."



- •Can be either associated with a clot in a brain blood vessel (embolic) or bleeding in the brain (hemorrhagic)
- •Symptoms include: Left or right sided weakness (paresis) numbness (paresthesia) or paralysis, facial droop, difficulty or inability to speak, vision disturbances including dizziness, loss of balance, sudden headache "Worst headache of my life."
- Early detection is critical due to a very short window to intervene.



- •Can be either associated with a clot in a brain blood vessel (embolic) or bleeding in the brain (hemorrhagic)
- •Symptoms include: Left or right sided weakness (paresis) numbness (paresthesia) or paralysis, facial droop, difficulty or inability to speak, vision disturbances including dizziness, loss of balance, sudden headache "Worst headache of my life."
- Early detection is critical due to a very short window to intervene.
- •CVA can be very debilitating to the patient as well is the family.
  - •Extended rehabilitation and/or need to reside in an assisted living situation.



# EMERGENCY SERVICES OF DOOR COUNTY



The Future

- Increase in call volume
  - Aging population
  - Lack of insurance
  - •Lack of primary care physicians

- •Increase in call volume
  - Aging population
  - •Lack of insurance
  - •Lack of primary care physicians
- Decline in volunteerism

- Increase in call volume
  - Aging population
  - •Lack of insurance
  - •Lack of primary care physicians
- Decline in volunteerism
- Increased expectation to respond at a high level of care
  - Increased training requirements
  - Response times

- Increase in call volume
  - Aging population
  - •Lack of insurance
  - •Lack of primary care physicians
- Decline in volunteerism
- Increased expectation to respond at a high level of care
  - Increased training requirements
  - Response times
- Changing community demographics

- Increase in call volume
  - Aging population
  - Lack of insurance
  - Lack of primary care physicians
- Decline in volunteerism
- Increased expectation to respond at a high level of care
  - Increased training requirements
  - Response times
- •Changing community demographics
- •To effectively meet the increasing needs of the community, additional resources and infrastructure must be available.

# EMERGENCY SERVICES OF DOOR COUNTY



Questions